

電磁學二

Electromagnetics II

Description:

This course is an extended lecture of Electromagnetics I, which covers the basic theory of electromagnetic waves and related topics including conservation laws, potentials and fields, wave propagation and radiation, and so forth. Students are suggested to have basic knowledge of electrostatics, magnetostatics, as well as electrodynamics.

Course outline:

1. Conservation Laws
2. Electromagnetic Waves
3. Potentials and Fields
4. Radiation
5. Electrodynamics and Relativity

Prerequisite:

Basic knowledge of the first course of electromagnetics

Text book:

[Introduction to Electrodynamics \(3rd Edition\)](#) by David J. Griffiths

Grading:

20% homework , 40% midterm (exam), and 40% final (exam)